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# ADMX Status (30' + 10')

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Nearly all astrophysical and cosmological data point convincingly to a large component of cold dark matter (CDM) in the Universe. The axion particle, first theorized as a solution to the strong charge-parity problem of quantum chromodynamics, has been established as a prominent CDM candidate. Cosmic observation and particle physics experiments have bracketed the unknown mass of CDM axions between approximately a μeV and a meV. The Axion Dark Matter eXperiement (ADMX) is a direct-detection CDM axion search which has set limits at the KSVZ coupling of the axion to two photons for axion masses between 1.9 and 3.7 μeV. The current upgrades will allow ADMX to detect axions with even the most pessimistic couplings in this mass range. In order to expand the mass reach of the detector, ADMX is conducting extensive research and development of microwave cavity technology. Status of the experiment, current research, and projected results will be presented.

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**Session Classification:** Dark Matter Detection

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